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<211> 1194

<212> DNA

<213> Homo sapiens

<400> 49

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graacagica aataicatti acicticito atiagertig ggigeeriig ceacaagace
tagcctaatt taccaaggat gaattettte aattetteat gegtgeeeag caaaaaaaa
1440
aaaaaa
1446
<210> 56
<211> 143
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (143)
<223> Xaa equals stop translation
<400> 56
Met Ser Gly Ile Ser Gly Cys Pro Phe Phe Leu Trp Gly Leu Leu Ala
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Leu Leu Gly Leu Ala Leu Val Ile Ser Leu Ile Phe Asn Ile Ser His
Tyr Val Glu Lys Gln Arg Gln Asp Lys Met Tyr Ser Tyr Ser Ser Asp
         35
                             40
                                                 45
His Thr Arg Val Asp Glu Tyr Tyr Ile Glu Asp Thr Pro Ile Tyr Gly
Asn Leu Asp Asp Met Ile Ser Glu Pro Met Asp Glu Asn Cys Tyr Glu
Gln Met Lys Ala Arg Pro Glu Lys Ser Val Asn Lys Met Gln Glu Ala
                 85
Thr Pro Ser Ala Gln Ala Thr Asn Glu Thr Gln Met Cys Tyr Ala Ser
                                105
Leu Asp His Ser Val Lys Gly Lys Arg Arg Ser Pro Gly Asn Arg Ile
       115
                            1.20
Leu Ile Ser Gln Thr Arg Met Glu Met Ser Asn Tyr Met Gln Xaa
<210> 57
<211> 51
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (51)
<223> Xaa equals stop translation
<400> 57
Met Ala Leu Met Trp Ser Leu Trp Tyr Phe Asn Ser Val Phe Ile Ile
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Ser Cys Val Ser Gly Lys Ile Val Leu Thr Phe Pro Leu Tyr Thr Thr 20 25 30

Val Cys Ser Tyr Gly Ala Leu Asn Cys Leu Thr Glu Glu Pro Ser Ser
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Val Phe Xaa 50

<210> 58 <211> 102 <212> PRT <213> Homo sapiens

<220> <221> SITE <222> (102)

<223> Xaa equals stop translation

Pro Ile Leu Ala Met Leu Met Ala Leu Cys Val His Cys His Arg Leu 20 25 30

Pro Gly Ser Tyr Asp Ser Thr Ser Ser Asp Ser Leu Tyr Pro Lys Gly 35 40 45

His Pro Val Gln Thr Ala Ser His Gly Cys Pro Leu Ala Thr Cys Leu 50 55 60

Pro Thr Cys His Leu Leu Pro Thr Pro Glu Pro Ala Arg Pro Ala Pro 65 70 75 80

His Pro Lys Ile Pro Ala Ala Pro Trp Gly Leu Pro Pro Asp Ala Ile 85 90 95

Phe Pro Ala Gly Phe Xaa 100

<210> 59
<211> 48
<212> PRT
<213> Homo sapiens
<220>
<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation

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<400> 59
Met Ser Cys Ile Gly Arg Met Arg Leu Ile Cys Phe Ile Ile Leu Arg
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Ile Cys Gly Leu Glu His Leu Phe Gly Asn Met Gly Leu Gly Xaa Lys
Asn Gly His Leu Pro Gly His Tyr Gly His Ser Leu Glu Phe Phe Xaa
         35
                             40
<210> 60
<211> 98
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (98)
<223> Xaa equals stop translation
<400> 60
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                                     10
Ser Pro Gly Asn Arg Glu Asn Lys Glu Lys Lys Val Phe Ile Ser Leu
Val Gly Ser Arg Gly Leu Gly Cys Ser Ile Ser Ser Gly Pro Ile Gln
Lys Pro Gly Ile Phe Ile Ser His Val Lys Pro Gly Ser Leu Ser Ala
                         55
Glu Val Gly Leu Glu Ile Gly Asp Gln Ile Val Glu Val Asn Gly Val
 65
Asp Phe Ser Asn Leu Asp His Lys Glu Leu Gln Leu Ala Gly Ser Cys
                                    90
Ser Xaa
<210> 61
<211> 52
<212> PRT
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```
<210> 61
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals stop translation

<400> 61
```

```
37
Met Tro Phe Arg Cys Phe Leu Leu Ile Phe Val Ser Ser Val Thr Leu
                                     10
Thr Gly Asp Phe Arg Asn Met Lys Lys Pro Ser Ser Leu Cys Leu Phe
Arg Gln Gly Leu Met Ser Ala Ser Glu Val Ser Gly Ser Gly Ser Gly
Glu Gly Asp Kaa
    50
<210> 62
<211> 52
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (52)
<223> Xaa equals stop translation
<400> 62
Met Tyr Cys Leu Cys Gly Leu Leu Leu Gln Ala Leu Leu Arg Leu Cys
Asn Gly Tyr Lys Thr Gln Lys Asn His Arg Glu Leu Arg Met Cys Gly
                                 25
Ile Ile Ala Gln Gly Lys Ser Arg Trp Gln Leu His Cys Tyr Pro Gly
                           40
Met Lys Ser Xaa
. 50
<210> 63
<211> 71
<212> PRT
<213> Homo sapiers
<400> 63
Met Leu Pro Leu Lys Ile Ala Ala Pro Tyr Leu Leu Glu Asn Cys Ser
                                    10
Cys Pro Ile Tyr Ile Ser Thr Ser Pro His Leu Phe Leu Ser Thr Met
                                 25
Phe Val Phe Leu Ser Val Leu Tyr Ser Leu Ser Leu Glu Tyr Met Phe
         35
Leu Phe Val Phe Gly Lys Lys Ile Ser Phe Thr Ser Leu His Ser Asp
```

Gln Leu Gly Lys Lys Lys Ala

```
<210> 64
<211> 42
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (42)
<223> Xaa equals stop translation
Met Tyr Met Lys Gln Val Val Ala Cys Arg Asp Gln Leu Ile Leu Val
                                    10
Leu Trp Leu Ile Glu Leu Leu Cys Ile Gln Gly Phe Cys Lys Ser Lys
Ser Asp Phe Ser Ser Arg Ile Tyr Ser Xaa
<210> 65
<211> 183
<212> PRT
<213> Homo sapiens
<400> 65
Met Ser Lys Glu Pro Leu Ile Leu Trp Leu Met Ile Glu Phe Trp Trp
Leu Tyr Leu Thr Pro Val Thr Ser Glu Thr Val Val Thr Glu Val Leu
                                25
            20
Gly His Arg Val Thr Leu Pro Cys Leu Tyr Ser Ser Trp Ser His Asn
Ser Asn Ser Met Cys Trp Gly Lys Asp Gln Cys Pro Tyr Ser Gly Cys
                        55
Lys Glu Ala Leu Ile Arg Thr Asp Gly Met Arg Val Thr Ser Arg Lys
Ser Ala Lys Tyr Arg Leu Gln Gly Thr Ile Pro Arg Gly Asp Val Ser
                 85
                                    90
Leu Thr Ile Leu Asn Pro Ser Glu Ser Asp Ser Gly Val Tyr Cys Cys
            100
                               1.05
Arg Ile Glu Val Pro Gly Trp Phe Asn Asp Val Lys Ile Asn Val Arg
Leu Asn Leu Gln Arg Ala Ser Thr Thr Thr His Arg Thr Ala Thr Thr
                      135
    130
Thr Thr Arg Arg Thr Thr Thr Ser Pro Thr Thr Arg Gln Met
Thr Thr Pro Ala Ala Leu Pro Thr Thr Lys Lys Lys Lys Lys
```

Lys Lys Lys Lys Lys Lys 180

<210> 66

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (58)

<223> Xaa equals stop translation

<400> 66

Met Leu Tyr Phe Cys Ser Ser Ile Trp Phe Gly Ile Tyr Phe Val Ala 1 5 10 15

Leu Ile Thr Val Phe Leu Lys Thr Leu Pro Pro Leu Thr Val Gl \hat{y} Lys 20 25 30

Gly Pro Phe Ser Gly Lys Phe Val Ala Phe Phe Phe Phe Leu Lys Glu 35 40 45

Ser Cys Ser Leu Leu Ser Ile Val Phe Xaa 50 55

<210> 67

<211> 100

<212> PRT

<213> Homo sapiens

<400> 67

Met Gln Phe Cys Glu Leu Trp Val Pro Leu Leu Ser Thr Leu Leu Asn
1 10 15

Thr Trp Gln Asn Leu Thr Leu Gly Cys Pro Ser Pro Asp Ser Lys Ser 20 25 30

Lys Ser Ser Pro Asp Pro Arg Ala Cys Pro Leu Phe Pro Ser Phe Leu 35 40

Leu Ser Leu Ser Phe Phe Leu Pro Phe Phe Phe Leu Phe Ser Phe Phe 65 70 75 80

Leu Ser Leu Ser Leu Ser Phe Phe Gln Asp Pro Val Gln Lys Lys Lys 85 90 95

Lys Lys Thr Arg 100

<210> 68 <211> 74

```
<212> PRT
<220>
<221> SITE
<222> (74)
```

40 <213> Homo sapiens <223> Xaa equals stop translation Met Phe Tyr Leu Tyr Ser Ile Phe Gln Val Leu Val Trp Leu Cys Gln 10 Ala Lys His Leu Ser Gln Ile Ser Ala Arg Ser Ser Arg Arg Leu Trp Arg Leu Ser Leu Ile Thr Phe Pro Pro Tyr Leu Ala Thr Ser Leu Ser 40 His Gly Pro His Val Cys Leu Gln Thr Leu Gly Tyr Glu Ser Cyş Glu His Thr Asp Leu Cys Phe Leu His Asp Xaa <210> 69 <211> 137 <212> PRT <213> Homo sapiens <400> 69 Met Met Phe Ala Gly Ser Cys Gly Phe Pro Ala Gin Pro Ala Thr Thr 10

Gly Pro Cys Gly Tyr Val Val Gln Pro Asn Thr Thr Gly Pro Phe Leu 25

Tyr Val Arg Gln Phe Tyr Pro Ala Arg His Leu Trp Thr Pro Ser Pro

Val-Cys Lys Pro Ser Ile Lys Pro His Val Ser Phe Ala Gly Ser Gly 50

Ser Leu Trp Arg Leu Glu Pro Tyr Ala Phe Pro Ile Glu Val Asn Arg

Gly Ser Ala Gln His Trp Val Pro Gly Met Gln Pro Cys Leu Phe Met 90

Phe Val Leu Met Gly Ile Met Trp Ala Thr Gly Ile Leu Pro Lys Ile

Met Pro Ser Arg Lys Arg Cys Leu Ser Ile Asp Ile Pro Ala Ala Pro 120

Gln Ala Gly Met Cys Leu Leu Ile Leu

<400> 72

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<210> 70
  <211> 46
  <212> PRT
  <213> Homo sapiens
  <220>
  <221> SITE
<222> (46)
  <223> Xaa equals stop translation
  Met Arg Thr Leu Ala Leu Leu Val Leu Leu Phe Cys Ser Cys Thr His
  Ser Ser Met Gly Trp Gly Arg Gln Ala Trp Gly Val Ala Leu Gly Glu
  Val Arg Ser Pro Pro Ala Glm Asp Thr Val Ala Lys Thr Xaa . .
                              40
  <210> 71
  <211> 64
  <212> PRT
  <213> Homo sapiens
  <220>
  <221> SITE
  <222> (64)
  <223> Xaa equals stop translation
  Met Cys Ala Trp His Cys Val His Leu Ala Leu Cys Val Val Gly Met
                                       10
  Leu Phe Leu Leu Ser Val Thr Ser Ser Gln Phe Cys Lys Gln Arg Gln
                                   25
  Asn His Ala Leu Pro Leu Lys Pro Ile Gly Phe Lys Cys His Leu Phe
  Asp Asp Ala Phe Pro Ile Thr Pro Phe Asp Thr Ser His Gly Thr Xaa
                           55
  <210> 72
  <211> 48
  <212> PRT
  <213> Homo sapiens
  <220>
  <221> SITE
  <222> (48)
  <223> Xaa equals stop translation
```

```
Met Phe Met Tyr Val Trp Cys Pro Leu Val Leu Phe Phe Phe Leu Leu 1 5 10 15
```

Val Phe Glu Leu Val Leu Asn Arg Ile Leu Ser Gly Phe Leu Lys Tyr 20 25 30

Phe His Phe His His Gly Tyr Asn Lys Phe Ala Ala Cys Pro Asn Xaa 35 40 45

```
<210> 73
<211> 49
```

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (49)

<223> Xaa equals stop translation

<400> 73

Met Val Ser Pro Trp Leu Pro Leu Leu Val Ser Leu Phe His Leu Leu
1 5 10 15

Asn Cys Leu Arg Gly Val Gly Thr Ser Gly Gln Ser Leu Gly Leu Pro 20 25 30

Ser Ser Ser Phe Pro Pro Thr Pro Glu His Lys Ala Thr Ala Arg Asp 35 40 45

Xaa

<210> 74

<211> 47

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (47)

<223> Xaa equals stop translation

<400> 74

Gly Lys Thr Leu Tyr Leu Pro Val Cys Leu Ser Phe Leu His Ser Pro 1 5 10 15

Ala Ser Thr Phe Leu Pro Trp Asn Gln Gly Phe Leu Ser Pro Phe Ala 20 25 30

Phe Ser Thr Leu Gly Thr Pro Gly Ala Lys Gln Phe Ser Ile Xaa 35 40 45

```
<211> 59
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (59)
<223> Xaa equals stop translation
<400> 75
Met Val Ser Leu Cys Ser Gly Leu Pro Ser Ser Cys Leu Leu Leu Gly
                                   10
Ser Thr Ala Ala Ile Ile Gln Arg Gln Val Cys Leu Phe Gln Gly Ala
Arg Gln Trp Asn Pro Val Ser Glu Phe Leu Arg Ala His His Cys
                        - 40
Gly Asn Arg Ala Gly Leu Pro Ala Val Leu Xaa
    50
                        55
<210> 76
<211> 318
<212> PRT
<213> Homo sapiens
<400> 76
Met Ala Lys Arg Thr Phe Ser Asn Leu Glu Thr Phe Leu Ile Phe Leu
                       10
Leu Val Met Met Ser Ala Ile Thr Val Ala Leu Leu Ser Leu Leu Phe
Ile Thr Ser Gly Thr Ile Glu Asn His Lys Asp Leu Gly Gly His Phe
                            40
Phe Ser Thr Thr Gln Ser Pro Pro Ala Thr Gln Gly Ser Thr Ala Ala
  50
                        55
Gln Arg Ser Thr Ala Thr Gln His Ser Thr Ala Thr Gln Ser Ser Thr
Ala Thr Gln Thr Ser Pro Val Pro Leu Thr Pro Glu Ser Pro Leu Phe
                 85
                                   90
Gln Asn Phe Ser Gly Tyr His Ile Gly Val Gly Arg Ala Asp Cys Thr
Gly Gln Val Ala Asp Ile Asn Leu Met Gly Tyr Gly Lys Ser Gly Gln
                           120
Asn Ala Gln Gly Ile Leu Thr Arg Leu Tyr Ser Arg Ala Phe Ile Met
    130
Ala Glu Pro Asp Gly Ser Asn Arg Thr Val Phe Val Ser Ile Asp Ile
                    150
```

Gly Met Val Ser Gln Arg Leu Arg Leu Glu Val Leu Asn Arg Leu Gln 165 170 175

Ser Lys Tyr Gly Ser Leu Tyr Arg Arg Asp Asn Val Ile Leu Ser Gly 180 185 190

Thr His Thr His Ser Gly Pro Ala Gly Tyr Phe Gln Tyr Thr Val Phe 195 200 205

Val Ile Ala Ser Glu Gly Phe Ser Asn Gln Thr Phe Gln His Met Val 210 215 220

Thr Gly Ile Leu Lys Ser Ile Asp Ile Pro His Thr Asn Met Lys Pro 225 230 235 240

Gly Lys Ile Phe Ile Asn Lys Gly Asn Val Asp Gly Val Gln Ile Asn 245 250 255

Arg Ser Pro Tyr Ser Tyr Leu Gln Asn Pro Gln Ser $\tilde{\text{Glu}}$ Arg Ala Arg 260 265 270

Tyr Ser Ser Asn Thr Asp Lys Glu Met Ile Val Leu Lys Met Val Asp 275 280 285

Leu Asn Gly Asp Asp Leu Gly Leu Ile Ser Phe Ser Phe Ser Lys Ser 290 295 300

Ala Leu Gly Thr Tyr Tyr Glu Pro Arg Asn Thr Ser Leu Glu 305 310 315

<210> 77

<211> 44

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (44)

<223> Xaa equals stop translation

<400> 77

Met Ser Ser Trp Phe Thr Leu Leu Ala Ser Cys Phe His Leu Leu Trp
1 5 10 15

Pro Leu Ser Arg Ser Ser His Val Pro Ser Ser Phe Gln Pro Pro Asp

Leu Ser Ala Thr Phe Leu Leu Gl
n Ile Leu Gly Xaa 35

<210> 78

<211> 48

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (48)

<223> Xaa equals stop translation

<400> 78

Met Leu Ile Ser Val Asp Ser Asn Val Pro Val Val Phe Leu Leu 1 5 10 15

Phe Ile Leu Val Ile Leu Cys His Met Glu Cys Lys Gly His Ile Tyr
20 25 30

Ile Cys Val Cys Val Cys Val Tyr Met Tyr Ile Phe Lys Asn Ile Xaa 35 40 45

<210> 79

<211> 525

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (210)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 79

Met Leu Ala Phe Pro Leu Leu Thr Gly Leu Ile Ser Phe Arg Glu
1 10 15

Lys Arg Leu Gln Asp Val Gly Thr Pro Ala Ala Arg Ala Arg Ala Phe 20 25 30

Phe Thr Ala Pro Val Val Phe His Leu Asn Ile Leu Ser Tyr Phe 35 40 45

Ala Phe Leu Cys Leu Phe Ala Tyr Val Leu Met Val Asp Phe Gln Pro 50 60

Val Pro Ser Trp Cys Glu Cys Ala Ile Tyr Leu Trp Leu Phe Ser Leu 65 70 75 80

Val Cys Glu Glu Met Arg Gln Leu Phe Tyr Asp Pro Asp Glu Cys Gly
85 90 95

Leu Met Lys Lys Ala Ala Leu Tyr Phe Ser Asp Phe Trp Asn Lys Leu 100 105 110

Asp Val Gly Ala Ile Leu Leu Phe Val Ala Gly Leu Thr Cys Arg Leu 115 120 125

Ile Pro Ala Thr Leu Tyr Pro Gly Arg Val Ile Leu Ser Leu Asp Phe 130 135 140

Ile Leu Phe Cys Leu Arg Leu Met His Ile Phe Thr Ile Ser Lys Thr 145 150 155 160

Leu Gly Pro Lys Ile Ile Ile Val Lys Arg Met Met Lys Asp Val Phe

				T03					1/0					1/3	
Phe	Phe	Leu	Phe 180	Leu	Leu	Ala	Val	Trp 185	Val	Val	Ser	Phe	Gly 190	Val	Ala
Lys	Gln	Ala 195	Ile	Leu	Ile	His	Asn 200	G≟u	Arg	Arg	Val	Asp 205	Trp	Leu	Phe
Arg	Xaa 210	Ala	Val	Tyr	His	Ser 215	Tyr	Leu	Thr	Ile	Phe 220	Gly	Gln	Ile	Pro
Gly 225	Tyr	Ile	Asp	Gly	Val 230	Asn	Phe	Asn	Pro	Glu 235	His	Cys	Ser	Pro	Asn 240
Gly	Thr	Asp	Pro	Tyr 245	Lys	Pro	Lys	Cys	Pro 250	Glu	Ser	Asp	Ala	Thr 255	Gln
Gln	Arg	Pro	Ala 260	Phe	Pro	Glu	Trp	Leu 265	Thr	Val	Leu	Leu -	Leu 270	Cys	Leu
Tyr	Leu	Leu 275	Phe	Thr	Asn	Ile	Leu 280	Leu	Leu	Asn	Leu	Leu 285	Ile	Ala	Met
Phe	Asn 290	Tyr	Thr	Phe	Gln	Gln 295	Val	Gln	Glu	His	Thr 300	Asp	Gln	Ile	Trp
Lys 305	Phe	Gln	Arg	His	Asp 310	Leu	Ile	Glu	Glu	Tyr 315	His	Gly	Arg	Pro	Ala 320
Ala	Pro	Pro	Pro	Phe 325	Ile	Leu `.	Leu	Ser	His 330	Leu	Gln	Leu	Phe	Ile 335	Lys
Arg	Val	Val	Leu 340	Lys	Thr	Pro	Ala	Lys 345	Arg	His	Lys	Gln	Leu 350	Lys	Asn
Lys	Leu	Glu 355	Lys	Asn	Glu	Glu	Ala 360	Ala	Leu	Leu	Ser	Trp 365	Glu	Ile	Tyr
Leu	Lys 370 -	Glu	Asn	Tyr	Leu	Gln 375	Asn	Arg	Gln	Phe	Gln 380	Gln	Lys	Gln	Arg
Pro 385	Glu	Gln	Lys	Ile	Glu 390	Asp	Ile	Ser	Asn	Lys 395	Val	Asp	Ala	Met	Val 400
Asp	Leu	Leu	Asp	Leu 405 •	Asp	Pro	Leu	Lys	Arg 410	Ser	Gly	Ser	Met	Glu 415	Gln
Arg	Leu	Ala	Ser 420	Leu	Glu	Glu	Gln	Val 425	Ala	Gln	Thr	Ala	Arg 430	Ala	Leu
His	Trp	Ile 435	Val	Arg	Thr	Leu	Arg 440	Ala	Ser	Gly	Phe	Ser 445	Ser	Glu	Ala
Asp	Val 450	Pro	Thr	Leu	Ala	Ser 455	Gln	Lys	Ala	Ala	Glu 460	Glu	Pro	Asp	Ala
Glu 465	Pro	Gly	Gly	Arg	Lys 470	Lys	Thr	Glu	Glu	Pro 475	Gly	Asp	Ser	Tyr	His 480

```
47
Val Asn Ala Arg His Leu Leu Tyr Pro Asn Cys Pro Val Thr Arg Phe
                                   490
                485
Pro Val Pro Asn Glu Lys Val Pro Trp Glu Thr Glu Phe Leu Ile Tyr
                                505
Asp Pro Pro Phe Tyr Thr Ala Glu Arg Lys Asp Ala Ala
                            520
<210> 80
<211> 48
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (48)
<223> Xaa equals stop translation
<400> 80
Met Ala Gly Thr Val Leu Gly Val Gly Ala Gly Val Phe Ile Leu Ala
                                    10
Leu Leu Trp Val Ala Val Leu Leu Cys Val Leu Leu Ser Arg Ala
                                 25
             20
Ser Gly Ala Ala Arg Phe Ser Val Ile Phe Tyr Ser Ser Val Leu Xaa
                                                 45
<210> 81
<211> 48
<212> PRT
 <213> Homo sapiens
<220>
 <221> SITE
 <222> (48)
<223> Xaa equals stop translation
```

<223> Xaa equals stop translation
<400> 81
Met Ser Leu Leu Pro Pro Leu Ala Leu Leu Leu Leu Leu Ala Ala

Leu Val Ala Pro Ala Thr Ala Ala Thr Ala Tyr Arg Pro Asp Trp Asn 20 25 30

Arg Leu Ser Gly Leu Thr Arg Ala Arg Val Glu Thr Cys Gly Gly Xaa 35 40 45

<211> 293

<212> PRT

<213> Homo sapiens

<400> 82

Met Ala Thr Ala Arg Pro Pro Trp Met Trp Val Leu Cys Ala Leu Ile 1 5 10 15

Thr Ala Leu Leu Gly Val Thr Glu His Val Leu Ala Asn Asn Asp 20 25 30

Val Ser Cys Asp His Pro Ser Asn Thr Val Pro Ser Gly Ser Asn Gln
35 40 45

Asp Leu Gly Ala Gly Ala Gly Glu Asp Ala Arg Ser Asp Asp Ser Ser 50 55 60

Ser Arg Ile Ile Asn Gly Ser Asp Cys Asp Met His Thr Gln Pro Trp 65 70 75 - 80

Gln Ala Ala Leu Leu Leu Arg Pro Asn Gln Leu Tyr Cys Gly Ala Val 85 90 95

Leu Val His Pro Gln Trp Leu Leu Thr Ala Ala His Cys Arg Lys Lys
100 105 110

Val Phe Arg Val Arg Leu Gly His Tyr Ser Leu Ser Pro Val Tyr Glu 115 120 125

Ser Gly Gln Gln Met Phe Gln Gly Val Lys Ser Ile Pro His Pro Gly 130 135 140

Arg Arg Ile Arg Pro Thr Lys Asp Val Arg Pro Ile Asn Val Ser Ser 165 170 175

His Cys Pro Ser Ala Gly Thr Lys Cys Leu Val Ser Gly Trp Gly Thr 180 185 190

Thr Lys Ser Pro Gln Val His Phe Pro Lys Val Leu Gln Cys Leu Asn 195 200 205

Ile Ser Val Leu Ser Gln Lys Arg Cys Glu Asp Ala Tyr Pro Arg Gln
210 215 220

Ile Asp Asp Thr Met Phe Cys Ala Gly Asp Lys Ala Gly Arg Asp Ser 225 230 235 240

Cys Gln Gly Asp Ser Gly Gly Pro Val Val Cys Asn Gly Ser Leu Gln 245 250 250

Gly Leu Val Ser Trp Gly Asp Tyr Pro Cys Ala Arg Pro Asn Arg Pro 260 265 270

Gly Val Tyr Thr Asn Leu Cys Lys Phe Thr Lys Trp Ile Gln Glu Thr 275 280 285

```
Ile Gln Ala Asn Ser
    290
<210> 83
<211> 89
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (89)
<223> Xaa equals stop translation
Met Val Ala Gly Phe Val Phe Tyr Leu Gly Val Phe Val Val Cys His
                                    10 -
Gln Leu Ser Ser Ser Leu Asn Ala Thr Tyr Arg Ser Leu Val Ala Arg
Glu Lys Val Phe Trp Asp Leu Ala Ala Thr Arg Ala Val Phe Gly Val
                                                 45
         35
                             40
Gln Ser Thr Ala Ala Ala Val Gly Ser Ala Gly Gly Pro Cys Ala Ala
Cys Arg Gln Gly Ala Trp Pro Ala Glu Leu Val Leu Val Ser His His
Asp Ser Asn Gly Ile Leu Leu Xaa
                85
<210> 84
<211> 250
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (212)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (213)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (215)
<223> Xaa equals any of the naturally occurring L-amino acids
```

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50
<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (218)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (250)
<223> Xaa equals stop translation
<400> 84
Met Trp Arg Cys Pro Leu Gly Leu Leu Leu Leu Pro Leu Ala Gly
                  5
His Leu Ala Leu Gly Ala Gln Gln Gly Arg Gly Arg Glu Leu Ala
Pro Gly Leu His Leu Arg Gly Ile Arg Asp Ala Gly Gly Arg Tyr Cys
Gln Glu Gln Asp Leu Cys Cys Arg Gly Arg Ala Asp Asp Cys Ala Leu
                        `55
Pro Tyr Leu Gly Ala Ile Cys Tyr Cys Asp Leu Phe Cys Asn Arg Thr
Val Ser Asp Cys Cys Pro Asp Phe Trp Asp Phe Cys Leu Gly Val Pro
                 85
Pro Pro Phe Pro Pro Ile Gln Gly Cys Met His Gly Gly Arg Ile Tyr
            100
                                1.05
Pro Val Leu Gly Thr Tyr Trp Asp Asn Cys Asn Arg Cys Thr Cys Gln
                            120
Glu Asn Arg Gln Trp Gln Cys Asp Gln Glu Pro Cys Leu Val Asp Pro
                       135
    130
Asp Met Ile Lys Ala Ile Asn Gln Gly Asn Tyr Gly Trp Gln Ala Gly
                                        155
                    150
Xaa His Ser Ala Phe Trp Gly Met Thr Leu Asp Glu Gly Ile Arg Tyr
                                    170
                165
Arg Leu Gly Thr Ile Arg Pro Ser Ser Ser Val Met Asn Met His Glu
             180
                                 185
Ile Tyr Thr Val Leu Asn Pro Gly Glu Val Leu Pro Thr Ala Phe Glu
```

```
Ala Ser Glu Xaa Xaa Pro Xaa Xaa Phe Xaa Ser Leu Xaa Thr Lys Ala
                       215
    210
Thr Val Gln Ala Pro Gly Pro Ser Pro Gln Gln Leu Trp His Pro Ile
                    230
Val Ser Gln Ser Ile Leu Trp Asp Thr Xaa
               245
<210> 85
<211> 58
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (58)
<223> Xaa equals stop translation
<400> 85
Met Tyr Thr Lys Leu Met Leu Asn Lys Val Leu Leu Phe Trp Gln Ile
                       10
Val Lys Cys Lys Val Leu Val Asp Gln Tyr Cys Tyr Asn Phe Gly Ala
Lys Leu Leu His Ala Asp Trp Leu Trp Asp Leu Val His Phe Leu Arg
                            40
Thr Asn Val Glu Phe Glu Lys Thr Pro Xaa
                        55
     50
<210> 86
<211> 49
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (49)
<223> Xaa equals stop translation
<400> 86
Met Phe Leu Gly Ser Leu Cys Phe Ser Leu Leu Cys His Ala Gly Cys
Gln Gly Ser Gly Gly Lys Pro Ala Val Thr Gly Leu Thr Gln Leu Pro
His Asn Pro Lys Gly Trp Phe His Ser His His Ala Pro Arg Pro Gln
```

Xaa

```
52
 <210> 87
 <211> 172
 <212> PRT
, <213> Homo sapiens
 <220>
 <221> SITE
 <222> (170)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 87
 Met Arg Gly Ser Val Glu Cys Thr Trp Gly Trp Gly His Cys Ala Pro
  Ser Pro Leu Leu Leu Trp Thr Leu Leu Leu Phe Ala Ala Pro Phe Gly
                                  25
  Leu Leu Gly Glu Lys Thr Arg Gln Leu Leu Glu Phe Asp Ser Thr Asn
                               40
  Val Ser Asp Thr Ala Ala Lys Pro Leu Gly Arg Pro Tyr Pro Pro Tyr
  Ser Leu Ala Asp Phe Ser Trp Asn Asn Ile Thr Asp Ser Leu Asp Pro
                       70
  65
  Ala Thr Leu Ser Ala Thr Phe Gln Gly His Pro Met Asn Asp Pro Thr
  Arg Thr Phe Ala Asn Gly Ser Leu Ala Phe Arg Val Gln Ala Phe Ser
                              105
  Arg Ser Ser Arg Pro Ala Gln Pro Pro Arg Leu Leu His Thr Ala Asp
                              120 .
          115
  Thr Cys Gln Leu Glu Val Ala Leu Ile Gly Ala Ser Pro Arg Gly Asn
                          135
  Arg Ser Leu Phe Gly Leu Glu Val Ala Thr Leu Gly Gln Gly Pro Asp
                      150
  145
  Cys Pro Ser Met Gln Glu Gln His Ser Xaa Glu Arg
                  165
                                       170
  <210> 88
  <211> 174
  <212> PRT
  <213> Homo sapiens
  <220>
  <221> SITE
  <222> (174)
  <223> Xaa equals stop translation
```

Met Val Phe Leu Lys Phe Phe Cys Met Ser Phe Phe Cys His Leu Cys

Gln Gly Tyr Phe Asp Gly Pro Leu Tyr Pro Glu Met Ser Asn Gly Thr 20 25 30

Leu His His Tyr Phe Val Pro Asp Gly Asp Tyr Glu Glu Asn Asp Asp 35 40 45

Pro Glu Lys Cys Gln Leu Leu Phe Arg Val Ser Asp His Arg Arg Cys 50 55 60

Ser Gln Gly Glu Gly Ser Gln Val Gly Ser Leu Leu Ser Leu Thr Leu 65 70 75 80

Arg Glu Glu Pne Thr Val Leu Gly His Gln Val Glu Gly Cys Trp Ala 85 90 95

Arg Ala Gly Gly His Gln Gln Lys His Leu Leu Arg Pro Arg Arg Gly 100 105 110

Arg Glu Leu Trp Gln Val Pro Ala Ala Gly Val Pro Pro Asp Arg Gly
115 120 125

Met Pro Thr Pro Thr Arg Thr Asn Pro Ser Leu Ser Trp Arg Ala Ser 130 135 140

Ser Ser Arg Ala Arg Asn Arg Thr Ala Gly Arg Arg Ala Gly Ser Thr 145 150 155 160

Arg Thr Phe Trp Glu Cys Trp Ser Thr Pro Gly Pro Cys Xaa 165 170

<210> 89

<211> 275

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (275)

<223> Xaa equals stop translation

<400> 89

Met Phe Tyr Ile Ile Gly Gly Val Ala Thr Leu Leu Leu Ile Leu Val 1 5 10

Ile Ile Val Phe Lys Glu Lys Pro Lys Tyr Pro Pro Ser Arg Ala Gln 20 25 30

Ser Leu Ser Tyr Ala Leu Thr Ser Pro Asp Ala Ser Tyr Leu Gly Ser 35 40 45

Ile Ala Arg Leu Phe Lys Asn Leu Asn Phe Val Leu Leu Val Ile Thr
50 55 60

Tyr Gly Leu Asn Ala Gly Ala Phe Tyr Ala Leu Ser Thr Leu Leu Asn 65 70 75 80

Arg Met Val Ile Trp His Tyr Pro Gly Glu Glu Val Asn Ala Gly Arg 85 90 95

Ile Gly Leu Thr Ile Val Ile Ala Gly Met Leu Gly Ala Val Ile Ser 100 105 110

Gly Ile Trp Leu Asp Arg Ser Lys Thr Tyr Lys Glu Thr Thr Leu Val 115 120 125

Val Tyr Ile Met Thr Leu Val Gly Met Val Val Tyr Thr Phe Thr Leu 130 135 140

Asn Leu Gly His Leu Trp Val Val Phe Ile Thr Ala Gly Thr Met Gly 145 150 155 160

Phe Phe Met Thr Gly Tyr Leu Pro Leu Gly Phe Glu Phe Ala Val Glu
165 170 175

Leu Thr Tyr Pro Glu Ser Glu Gly Ile Ser Ser Gly Leu Leu Asn Ile 180 185 190

Ser Ala Gln Val Phe Gly Ile Ile Phe Thr Ile Ser Gln Gly Gln Ile 195 200 205

Ile Asp Asn Tyr Gly Thr Lys Pro Gly Asn Ile Phe Leu Cys Val Phe 210 215 220

Leu Thr Leu Gly Ala Ala Leu Thr Ala Phe Ile Lys Ala Asp Leu Arg 225 230 235 240

Arg Gln Lys Ala Asn Lys Glu Thr Leu Glu Asn Lys Leu Gln Glu Glu 245 250 255

Glu Glu Glu Ser Asn Thr Ser Lys Val Pro Thr Ala Val Ser Glu Asp 260 265 270

His Leu Xaa 275

<210> 90

<211> 83

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (83)

<223> Xaa equals stop translation

<400> 90

Met Lys Lys Val Ala Arg Leu Ser Ser Leu Gly His Val Val Trp Arg 1 10 15

Leu Tyr Ala Arg Val Leu Ala Leu Ile Thr Cys Ile Phe Trp Val Leu $20 \hspace{1cm} 25 \hspace{1cm} 30$

Ala Leu Ile Ile Cys Ile Phe Thr Pro Gln Ile Phe Phe Lys His Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Leu His Ala Arg Pro Cys Ser Arg Tyr Arg Arg Tyr Asn Ser Lys Asn

7

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Thr Asp Leu Ala Leu Met Lys Leu Lys Leu Leu Arg Gln Ala Asp Ser 65 70 75 80
```

Asp Lys Xaa

<210> 91

<211> 212

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (212)

<223> Xaa equals stop translation

<400> 91

Met Ala Asn Ala Gly Leu Gln Leu Leu Gly Phe Ile Leu Ala Phe Leu $1 \hspace{1.5cm} 5 \hspace{1.5cm} 10 \hspace{1.5cm} 15$

Gly Trp Ile Gly Ala Ile Val Ser Thr Ala Leu Pro Gln Trp Arg Ile 20 25 30

Tyr Ser Tyr Ala Gly Asp Asn Ile Val Thr Ala Gln Ala Met Tyr Glu $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gly Leu Trp Met Ser Cys Val Ser Gln Ser Thr Gly Gln Ile Gln Cys
50 60

Lys Val Phe Asp Ser Leu Leu Asn Leu Ser Ser Thr Leu Gln Ala Thr 65 70 75 80

Arg_Ala Leu Met Val Val Gly Ile Leu Leu Gly Val Ile Ala Ile Phe 85 90 95

Val Ala Xaa Val Gly Met Lys Cys Met Lys Cys Leu Glu Asp Asp Glu
100 105 110

Val Gln Lys Met Arg Met Ala Val Ile Gly Gly Ala Ile Phe Leu Leu 115 120 125

Ala Gly Leu Ala Ile Leu Val Ala Thr Ala Trp Tyr Gly Asn Arg Ile 130 140

Val Gln Glu Phe Tyr Asp Pro Met Thr Pro Val Asn Ala Arg Tyr Glu 145 150 155 160

Phe Gly Gln Ala Leu Phe Thr Gly Trp Ala Ala Ala Ser Leu Cys Leu 165 170 175

Leu Gly Gly Ala Leu Leu Cys Cys Ser Cys Pro Arg Lys Thr Thr Ser

```
Tyr Pro Thr Pro Arg Pro Tyr Pro Lys Pro Ala Pro Ser Ser Gly Lys
                           200
      195
Asp Tyr Val Xaa
    210
<210> 92
<211> 41
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (41)
<223> Xaa equals stop translation
<400> 92
Met Phe Val Phe Leu Ser Val Leu Tyr Ser Leu Ser Leu Glu Tyr Met
                                   10
Phe Leu Phe Val Phe Gly Lys Lys Ile Ser Phe Thr Ser Leu His Ser
                                25
Asp Gln Leu Gly Lys Lys Lys Ala Xaa
<210> 93
<211> 49
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (49)
<223> Xaa equals stop translation
<400> 93
Met Gln Pro Cys Leu Phe Met Phe Val Leu Met Gly Ile Met Trp Ala
                                    10
Thr Gly Ile Leu Pro Lys Ile Met Pro Ser Arg Lys Arg Cys Leu Ser
                          25
 Ile Asp Ile Pro Ala Ala Pro Gln Ala Gly Met Cys Leu Leu Ile Leu
                           40
         35
 Xaa
```

<210> 94

<211> 90

<212> PRT

<213> Homo sapiens

```
<220>
```

<221> SITE

<222> (90)

<223> Xaa equals stop translation

<400> 94

Met Ala Lys Arg Thr Phe Ser Asn Leu Glu Thr Phe Leu Ile Phe Leu 1 5 10 15

Leu Val Met Met Ser Ala Ile Thr Val Ala Leu Leu Ser Leu Leu Phe 20 25 30

Ile Thr Ser Gly Thr Ile Glu Asn His Lys Asp Leu Gly Gly His Phe 35 40 45

Phe Ser Thr Thr Gln Ser Pro Pro Ala Thr Gln Gly Ser Thr Ala Ala 50 55 60

Gln Arg Ser Thr Ala Thr Gln His Ser Thr Ala Thr Gln Ser Ser Asn 65 70 75 80

Ser Gln Leu Lys Leu Leu Gln Cys Leu Xaa 85 90

<210> 95

<211> 486

<212> PRT

<213> Homo sapiens

<400> 95

Met Gln Pro Ser Gly Leu Glu Gly Pro Gly Thr Phe Gly Arg Trp Pro 1 5 10 15

Leu Leu Ser Leu Leu Leu Leu Leu Leu Leu Leu Gln Pro Val Thr Cys
20 25 30

Ala Tyr Thr Thr Pro Gly Pro Pro Arg Ala Leu Thr Thr Leu Gly Ala 35 40 45

Pro Arg Ala His Thr Met Pro Gly Thr Tyr Ala Pro Ser Thr Thr Leu 50 55 60

Ser Ser Pro Ser Thr Gln Gly Leu Gln Glu Gln Ala Arg Ala Leu Met
65 70 75 80

Arg Asp Phe Pro Leu Val Asp Gly His Asn Asp Leu Pro Leu Val Leu
85 90 95

Arg Gln Val Tyr Gln Lys Gly Leu Gln Asp Val Asn Leu Arg Asn Phe 100 105 110

Ser Tyr Gly Gln Thr Ser Leu Asp Arg Leu Arg Asp Gly Leu Val Gly 115 120 125

Ala Gln Phe Trp Ser Ala Tyr Val Pro Cys Gln Thr Gln Asp Arg Asp 130 135 140

Ala Leu Arg Leu Thr Leu Glu Gln Ile Asp Leu Ile Arg Arg Met Cys

Ala	Ser	Tyr	Ser	Glu 165	Leu	Glu	Leu	Val	Thr 170	Ser	Ala	Lys	Ala	Leu 175	Asn
Asp	Thr	Gln	Lys 180	Leu	Aia	Cys	Leu	Ile 185	Gly	Val	Glu	Gly	Gly 190	His	Ser
Leu	Asp	Asn 195	Ser	Leu	Ser	Ile	Leu 200	Arg	Thr	Phe	Tyr	Met 205	Leu	Gly	Val
Arg	Tyr 210	Leu	Thr	Leu	Thr	His 215	Thr	Cys	Asn	Thr	Pro 220	Trp	Ala	Glu	Ser
Ser 225	Ala	Lys	Gly	Val	His 230	Ser	Phe	Tyr	Asn	Asn 235	Ile	Ser	Gly	Leu	Thr 240
Asp	Phe	Gly	Glu	Lys 245	Val	Vaļ	Ala	Glu	Met 250	Asn	Arg	Leu	Gly	Met 255	Met
Val	Asp	Leu	Ser 260	His	Val	Ser	qaA	Ala 265	Val	Ala	Arg	Arg	Ala 270	Leu	Glu
Val	Ser	Gln 275	Ala	Pro	Val	Ile	Phe 280	Ser	His	Ser	Ala	Ala 285	Arg	Gly	Val
Cys	Asn 290	Ser	Ala	Arg	Asn	Val 295	Pro	Asp	Asp	Ile	Leu 300	Gln	Leu	Leu	Lys
Lys 305	Asn	Gly	Gly	Val	Val 310	Met	Val	Ser	Leu	Ser 315	Met	Gly	Val	Ile	Gln 320
Cys	Asn	Pro	Ser	Ala 325	Asn	Val	Ser	Thr	Val 330	Ala	Asp	His	Phe	Asp 335	His
Ile	Lys	Ala	Val 340	Ile	Gly	Ser	Lys	Phe 345	Ile	Gly	Ile	Gly	Gly 350	Asp	Tyr
Asp	Gly	Ala 355	Gly	Lys	Phe	Pro	Gln 360	Gly	Leu	Glu	Asp	Val 365	Ser	Thr	Tyr
Pro	Val 370	Leu	Ile	Glu	Glu	Leu 375	Leu	Ser	Arg	Gly	Trp 380	Ser	Glu	Glu	Glu
Leu 385	Gln	Gly	Val	Leu	Arg 390	Gly	Asn	Leu	Leu	Arg 395	Val	Phe	Arg	Gln	Val 400
Glu	Lys	Val	Gln	Glu 405		Asn	Lys	Trp	Gln 410	Ser	Pro	Leu	Glu	Asp 415	Lys
Phe	Pro	Asp	Glu 420	Gln	Leu	Ser	Ser	Ser 425		His	Ser	Asp	Leu 430	Ser	Arg
Leu	Arg	Gln 435	. Arg	Gln	Ser	Leu	Thr 440		Gly	Gln	Glu	Leu 445		Glu	Ile
Pro	Ile 450		Trp	Thr	Ala	Lys 455		Pro	Ala	Lys	Trp 460		Val	Ser	Glu

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Ser Ser Pro His Met Ala Pro Val Leu Ala Val Val Ala Thr Phe Pro 465 470 475 480
```

Val Leu Ile Leu Trp Leu 485

<210> 96

<211> 60

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (60)

<223> Xaa equals stop translation

<400> 96

Met Met Lys Asp Val Phe Phe Phe Leu Phe Leu Leu Ala Val Trp Val 1 5 10 15

Val Ser Phe Gly Val Ala Lys Gln Ala Ile Leu Ile His Asn Glu Arg 20 25 30

Arg Val Asp Trp Leu Phe Arg Gly Pro Ser Thr Thr Pro Thr Ser Pro 35 40 45

Ser Ser Gly Arg Ser Arg Ala Thr Ser Thr Val Xaa 50 55 60

<210> 97

<211> 293

<212> PRT

<213> Homo sapiens

<400> 97

Met Ala Thr Ala Arg Pro Pro Trp Met Trp Val Leu Cys Ala Leu Ile 1 5 10 15

Thr. Ala Leu Leu Gly Val Thr Glu His Val Leu Ala Asn Asn Asp 20 25 30

Val Ser Cys Asp His Pro Ser Asn Thr Val Pro Ser Gly Ser Asn Gln 35 40 45

Asp Leu Gly Ala Gly Ala Gly Glu Asp Ala Arg Ser Asp Asp Ser Ser 50 55 60

Ser Arg Ile Ile Asn Gly Ser Asp Cys Asp Met His Thr Gln Pro Trp 65 70 75 80

Gln Ala Ala Leu Leu Arg Pro Asn Gln Leu Tyr Cys Gly Ala Val 85 90 95

Leu Val His Pro Gln Trp Leu Leu Thr Ala Ala His Cys Arg Lys Lys 100 105 110

Val Phe Arg Val Arg Leu Gly His Tyr Ser Leu Ser Pro Val Tyr Glu

4

Gly 130					Val					His	Pro	GlZ
	 _	 	~	3	7	T	Mor	T 011	T10	Tirc	Lan	Acr

120

Tyr Ser His Pro Gly His Ser Asn Asp Leu Met Leu Ile Lys Leu Asn 145 150 155 160

Arg Arg Ile Arg Pro Thr Lys Asp Val Arg Pro Ile Asn Val Ser Ser 165 170 175

His Cys Pro Ser Ala Gly Thr Lys Cys Leu Val Ser Gly Trp Gly Thr 180 185 190

Thr Lys Ser Pro Gln Val His Phe Pro Lys Val Leu Gln Cys Leu Asn 195 200 205

Ile Ser Val Leu Ser Gln Lys Arg Cys Glu Asp Ala Tyr Pro Arg Gln 210 215 220

Ile Asp Asp Thr Met Phe Cys Ala Gly Asp Lys Ala Gly Arg Asp Ser 225 230 235 240

Cys Gln Gly Asp Ser Gly Gly Pro Val Val Cys Asn Gly Ser Leu Gln 245 250 255

Gly Leu Val Ser Trp Gly Asp Tyr Pro Cys Ala Arg Pro Asn Arg Pro 260 265 270

Gly Val Tyr Thr Asn Leu Cys Lys Phe Thr Lys Trp Ile Gin Glu Thr 275 280 285

Ile Gln Ala Asn Ser 290

<210> 98

<211> 62

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (62)

<223> Xaa equals stop translation

<400> 98

Met Ala Thr Ala Arg Pro Pro Trp Met Trp Val Leu Cys Ala Leu Ile 1 5 10 15

Thr Ala Leu Leu Gly Val Thr Glu His Val Leu Ala Asn Asn Asp 20 25 30

Val Ser Cys Asp His Pro Ser Asn Thr Val Pro Ser Gly Ser Asn Gln
35 40 45

Asp Leu Gly Ala Gly Ala Gly Gly Arg Arg Pro Val Gly Xaa 50 55 60

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<210> 99
<211> 132
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (132)
<223> Xaa equals stop translation
<400> 99
Met Arg Gly Ser Val Glu Cys Thr Trp Gly Trp Gly His Cys Ala Pro
                                     10
Ser Pro Leu Leu Teu Trp Thr Leu Leu Phe Ala Ala Pro Phe Gly
Leu Leu Gly Glu Lys Thr Arg Gln Leu Leu Glu Phe Asp Ser Thr Asn
Val Ser Asp Thr Ala Ala Lys Pro Leu Gly Arg Pro Tyr Pro Pro Tyr
     50
Ser Leu Ala Asp Phe Ser Trp Asn Asn Ile Thr Asp Ser Leu Asp Pro
                     70
Ala Thr Leu Ser Ala Thr Phe Gln Gly His Pro Met Asn Asp Pro Thr
Arg Thr Phe Ala Asn Gly Ser Leu Ala Phe Arg Ser Arg Pro Phe Pro
           100
Gly Pro Ala Asp Gln Pro Asn Pro Leu Ala Ser Cys Thr Gln Gln Thr
                         120
Pro Val Ser Xaa
   130
<210> 100
<211> 71
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (71)
<223> Xaa equals stop translation
<400> 100
Met Ala Asn Ala Gly Leu Gln Leu Leu Gly Phe Ile Leu Ala Phe Leu
Gly Trp Ile Gly Ala Ile Val Ser Thr Ala Leu Pro Gln Trp Arg Ile
 Tyr Ser Tyr Ala Gly Asp Asn Ile Val Thr Pro Arg Pro Cys Thr Arg
```

<212> PRT

<213> Homo sapiens

```
Gly Cys Gly Cys Pro Ala Cys Arg Arg Ala Pro Gly Arg Ser Ser Ala
    50
               55
Lys Ser Leu Thr Pro Cys Xaa
<210> 101
<211> 9
<212> PRT
<213> Homo sapiens
<400> 101
Ile Lys Ile Ser Leu Lys Lys Arg Ser
<210> 102
<211> 151
<212> PRT
<213> Homo sapiens
<400> 102
Ile Lys Ile Ser Leu Lys Lys Arg Ser Met Ser Gly Ile Ser Gly Cys
                                    1.0
Pro Phe Phe Leu Trp Gly Leu Leu Ala Leu Leu Gly Leu Ala Leu Val
Ile Ser Leu Ile Phe Asn Ile Ser His Tyr Val Glu Lys Gln Arg Gln
Asp Lys Met Tyr Ser Tyr Ser Ser Asp His Thr Arg Val Asp Glu Tyr
                        55
Tyr Ile Glu Asp Thr Pro Ile Tyr Gly Asn Leu Asp Asp Met Ile Ser
                7.0
Glu Pro Met Asp Glu Asn Cys Tyr Glu Gln Met Lys Ala Arg Pro Glu
                 85
Lys Ser Val Asn Lys Met Gln Glu Ala Thr Pro Ser Ala Gln Ala Thr
                              105
Asn Glu Thr Gln Met Cys Tyr Ala Ser Leu Asp His Ser Val Lys Gly
                        120
Lys Arg Arg Ser Pro Gly Asn Arg Ile Leu Ile Ser Gln Thr Arg Met
                        135
Glu Met Ser Asn Tyr Met Gln
 145 150
 <210> 103
 <211> 79
```

```
<400> 103
Gly Thr Arg Gly Leu Ser Thr Val Ser Trp Thr His Thr Gln Pro Ser
Lys Arg Gly Asp Pro Ser Arg Glu Pro Arg Gly Gly His Ser Cys Leu
Leu Pro Gly Ser Pro Ala Thr Trp Cys Leu Pro Ala Pro Cys Ser Leu
Pro Gly Pro Val Leu Thr Pro Ser Ser Ser Gly Leu Asp Ser Ala Leu
Glu Gly Pro Arg Gly Ala Ala Ser Leu Leu Arg Ala Pro Leu Gln
                    70
<210> 104
<211> 23
<212> PRT
<213> Homo sapiens
<400> 104
His Thr Gln Pro Ser Lys Arg Gly Asp Pro Ser Arg Glu Pro Arg Gly
                                  10
Gly His Ser Cys Leu Leu Pro
            20
<210> 105
<211> 22
<212> PRT
<213> Homo sapiens
<400> 105
Val Leu Thr Pro Ser Ser Ser Gly Leu Asp Ser Ala Leu Glu Gly Pro
        5 10
Arg Gly Ala Ala Ser Leu
            20
 <210> 106
 <211> 180
 <212> PRT
 <213> Homo sapiens
 <400> 106
 Gly Thr Arg Gly Leu Ser Thr Val Ser Trp Thr His Thr Gln Pro Ser
                       10 15
. Lys Arg Gly Asp Pro Ser Arg Glu Pro Arg Gly Gly His Ser Cys Leu
                                25
 Leu Pro Gly Ser Pro Ala Thr Trp Cys Leu Pro Ala Pro Cys Ser Leu
```

```
Pro Gly Pro Val Leu Thr Pro Ser Ser Ser Gly Leu Asp Ser Ala Leu 50 55 60
```

Glu Gly Pro Arg Gly Ala Ala Ser Leu Leu Arg Ala Pro Leu Gln Met 65 70 75 80

Glu Glu Ala Ile Leu Val Pro Cys Val Leu Gly Leu Leu Leu Pro 85 90 95

Ile Leu Ala Met Leu Met Ala Leu Cys Val His Cys His Arg Leu Pro 100 105 110

Gly Ser Tyr Asp Ser Thr Ser Ser Asp Ser Leu Tyr Pro Lys Gly His 115 120 125

Pro Val Gln Thr Ala Ser His Gly Cys Pro Leu Ala Thr Cys Leu Pro 130 135 140

Thr Cys His Leu Leu Pro Thr Pro Glu Pro Ala Arg Pro Ala Pro His 145 150 155 160

Pro Lys Ile Pro Ala Ala Pro Trp Gly Leu Pro Pro Asp Ala Ile Phe 165 170 175

Pro Ala Gly Phe 180

<210> 107

<211> 6

<212> PRT

<213> Homo sapiens

<400> 107

Cys Val His Cys His Arg

<210> 108

<211> 11

<212> PRT

<213> Homo sapiens

<400> 108

Ala Gly Ser Arg Thr Asn Asn Glu Gln Ile Glu
1 5 10

<210> 109

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 109

Ala Gly Ser Arg Thr Asn Asn Glu Gln Ile Glu Met Ser Cys Ile Gly
1 5 10 15

Arg Met Arg Leu Ile Cys Phe Ile Ile Leu Arg Ile Cys Gly Leu Glu 20 25 30

His Leu Phe Gly Asn Met Gly Leu Gly Xaa Lys Asn Gly His Leu Pro $35 \hspace{1cm} 40 \hspace{1cm} 45$

Gly His Tyr Gly His Ser Leu Glu Phe Phe 50

<210> 110

<211> 16

<212> PRT

<213> Homo sapiens

<400> 110

Gly Thr Ser Thr Ser Ser Arg Gly Arg Leu His Ala Cys Gly His Ser

<210> 111

<211> 95

<212> PRT

<213> Homo sapiens

<400> 111

Pro Ser Ser Glu Val Gln Lys Gly Lys Pro Asn Ser Pro Leu Gly Asn
1 5 10 15

Ser Glu Leu Arg Pro His Leu Val Asn Thr Lys Pro Arg Thr Ser Leu 20 25 30

Glu Arg Gly His Thr Ile Pro Phe Leu Trp Pro Ser Glu Phe Gly Leu $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ser Gln Leu Trp Gly Thr Pro Ser Leu Asn Pro Asn Lys Thr Pro Leu 50 55 60

Glu Ser Leu Ser Leu His Pro Ser Pro Leu Pro Ser Ala Leu Ile Ala 65 70 75 80

Ala Arg Ile Val Thr Pro Asn Leu Thr Leu Ser Ser Leu Ile Lys 85 90 95

<210> 112

<211> 21

<212> PRT

<213> Homo sapiens

<400> 112

Pro Asn Ser Pro Leu Gly Asn Ser Glu Leu Arg Pro His Leu Val Asn

1 5 10 15

```
Thr Lys Pro Arg Thr 20
```

<210> 113

<211> 23

<212> PRT

<213> Homo sapiens

<400> 113

Leu Ser Leu His Pro Ser Pro Leu Pro Ser Ala Leu Ile Ala Ala Arg 1 5 10 15

Ile Val Thr Pro Asn Leu Thr 20

<210> 114

<211> 268

<212> PRT

<213> Homo sapiens

<400> 114

Pro Gly Ser Gln Gly Ala Ala Ala Gly Arg Glu Leu Phe Met Thr Asp 1 5 10 15

Arg Glu Arg Leu Ala Glu Ala Arg Gln Arg Glu Leu Gln Arg Gln Glu 20 25 30

Leu Leu Met Gln Lys Arg Leu Ala Met Glu Ser Asn Lys Ile Leu Gln 35 . 40 45

Glu Gln Gln Glu Met Glu Arg Gln Arg Arg Lys Glu Ile Ala Gln Lys 50 55 60

Ala Ala Glu Glu Asn Glu Arg Tyr Arg Lys Glu Met Glu Gln Ile Val 65 70 75 80

Glu Glu Glu Glu Lys Phe Lys Lys Gln Trp Glu Glu Asp Trp Gly Ser 90 95

Lys Glu Gln Leu Leu Pro Lys Thr Ile Thr Ala Glu Val His Pro
100 105 110

Val Pro Leu Arg Lys Pro Lys Tyr Asp Gln Gly Val Glu Pro Glu Leu 115 . 120 125

Glu Pro Ala Asp Asp Leu Asp Gly Gly Thr Glu Glu Gln Gly Glu Gln 130 135 140

Asp Phe Arg Lys Tyr Glu Glu Gly Phe Asp Pro Tyr Ser Met Phe Thr 145 150 150 160

Pro Glu Gln Ile Met Gly Lys Asp Val Arg Leu Leu Arg Ile Lys Lys 165 170 175

Glu Gly Ser Leu Asp Leu Ala Leu Glu Gly Gly Val Asp Ser Pro Ile 180 185 190

```
Gly Lys Val Val Val Ser Ala Val Tyr Glu Arg Gly Ala Ala Glu Arg
       195 200
His Gly Gly Ile Val Lys Gly Asp Glu Ile Met Ala Ile Asn Gly Lys
                     215
Ile Val Thr Asp Tyr Thr Leu Ala Glu Ala Asp Ala Ala Leu Gln Lys
                                     235
                  230
Ala Trp Asn Gln Gly Gly Asp Trp Ile Asp Leu Val Val Ala Val Cys
                    250
Pro Pro Lys Glu Tyr Asp Asp Glu Leu Thr Phe Phe
<210> 115
<211> 23
<212> PRT
<213> Homo sapiens
<400> 115
Gly Arg Glu Leu Phe Met Thr Asp Arg Glu Arg Leu Ala Glu Ala Arg
               5
                              10
1
Gln Arg Glu Leu Gln Arg Gln
           20
<210> 116
<211> 22
<212> PRT
<213> Homo sapiens
<400> 116
Gln Gln Glu Met Glu Arg Gln Arg Arg Lys Glu Ile Ala Gln Lys Ala
 <u>1</u> 5
Ala Glu Glu Asn Glu Arg
           20
<210> 117
<211> 25
<212> PRT
<213> Homo sapiens
Lys Pro Lys Tyr Asp Gln Gly Val Glu Pro Glu Leu Glu Pro Ala Asp
                                  10
Asp Leu Asp Gly Gly Thr Glu Glu Gln
           20
```

<210> 118 <211> 25 <212> PRT

<400> 119

<213> Homo sapiens

Gly Thr Ser Thr Ser Ser Arg Gly Arg Leu His Ala Cys Gly His Ser

1 10 115 .

Met Ile Leu Leu Ser Leu Phe Gln Gly Val Arg Gly Ser Leu Gly 20 25 30

Ser Pro Gly Asn Arg Glu Asn Lys Glu Lys Lys Val Phe Ile Ser Leu 35 40 45

Val Gly Ser Arg Gly Leu Gly Cys Ser Ile Ser Ser Gly Pro Ile Gln 50 55 60

Lys Pro Gly Ile Phe Ile Ser His Val Lys Pro Gly Ser Leu Ser Ala 65 70 75 80

Glu Val Gly Leu Glu Ile Gly Asp Gln Ile Val Glu Val Asn Gly Val 85 90 95

Asp Phe Ser Asn Leu Asp His Lys Glu Leu Gln Leu Ala Gly Ser Cys
100 105 110

Ser

```
Cys Ser Cys Pro Ile Tyr Ile Ser Thr Ser Pro His Leu Phe Leu Ser
                       25
           20
Thr
<210> 122
<211> 19
<212> PRT
<213> Homo sapiens
<400> 122
Phe Ser Ile Leu Phe Ala Phe Val Leu Phe Tyr Pro Gly Ser Phe Phe
1 5
Thr Leu Pro
<210> 123
<211> 60
<212> PRT
<213> Homo sapiens
<400> 123
Phe Ser Ile Leu Phe Ala Phe Val Leu Phe Tyr Pro Gly Ser Phe Phe
                 5
                                   10
Thr Leu Pro Met Tyr Met Lys Gln Val Val Ala Cys Arg Asp Gln Leu
Ile Leu Val Leu Trp Leu Ile Glu Leu Cys Ile Gln Gly Phe Cys
                           40
Lys Ser Lys Ser Asp Phe Ser Ser Arg Ile Tyr Ser
    50
<210> 124
<211> 6
<212> PRT
<213> Homo sapiens
<400> 124
His Glu Ser Thr Val Lys
<210> 125
<211> 27
<212> PRT
<213> Homo sapiens
Leu Glu Asn Leu Gly Thr His Lys Lys Lys Asp Ser Phe Ser Val Lys
```

Thr Val Gly Ile Cys Cys Cys Phe His Leu Asn 20 25

<210> 126

<211> 84

<212> PRT

<213> Homo sapiens

<400> 126

Leu Glu Asn Leu Gly Thr His Lys Lys Lys Asp Ser Phe Ser Val Lys 1 5 10 15

Thr Val Gly Ile Cys Cys Cys Phe His Leu Asn Met Leu Tyr Phe Cys 20 25 30

Ser Ser Ile Trp Phe Gly Ile Tyr Phe Val Ala Leu Ile Thr Val Phe 35 40 45 .

Leu Lys Thr Leu Pro Pro Leu Thr Val Gly Lys Gly Pro Phe Ser Gly 50 55 60

Lys Phe Val Ala Phe Phe Phe Phe Leu Lys Glu Ser Cys Ser Leu Leu 65 70 75 80

Ser Ile Val Phe

<210> 127

<211> 6

<212> PRT

<213> Homo sapiens

<400> 127

Phe Thr Lys Cys Phe His

<210> 128

<211> 8

<212> PRT

<213> Homo sapiens

<400> 128

Gln Asn Met Asn Asp Tyr Asn Ile
1 -5

<210> 129

<211> 81

<212> PRT

<213> Homo sapiens

<400> 129

Gln Asn Met Asn Asp Tyr Asn Ile Met Phe Tyr Leu Tyr Ser Ile Phe

1 5 10 15

Gln Val Leu Val Trp Leu Cys Gln Ala Lys His Leu Ser Gln Ile Ser

Ala Arg Ser Ser Arg Arg Leu Trp Arg Leu Ser Leu Ile Thr Phe Pro

Pro Tyr Leu Ala Thr Ser Leu Ser His Gly Pro His Val Cys Leu Gln 55

Thr Leu Gly Tyr Glu Ser Cys Glu His Thr Asp Leu Cys Phe Leu His 75

Asp

<210> 130

<211> 51

<212> PRT

<213> Homo sapiens

<400> 130

į...

Pro Ala Arg His Leu Trp Thr Pro Ser Pro Val Cys Lys Pro Ser Ile 10

Lys Pro His Val Ser Phe Ala Gly Ser Gly Ser Leu Trp Arg Leu Glu

Pro Tyr Ala Phe Pro Ile Glu Val Asn Arg Gly Ser Ala Gln His Trp 35 40

Val Pro Gly 50

<210> 131

<211> 29

<212> PRT

<213> Homo sapiens

<400> 131

Val.Cys Lys Pro Ser Ile Lys Pro His Val Ser Phe Ala Gly Ser Gly

Ser Leu Trp Arg Leu Glu Pro Tyr Ala Phe Pro Ile Glu 20 25

<210> 132

<211> 48

<212> PRT

<213> Homo sapiens

<400> 132

Met Gln Pro Cys Leu Phe Met Phe Val Leu Met Gly Ile Met Trp Ala

Thr Gly Ile Leu Pro Lys Ile Met Pro Ser Arg Lys Arg Cys Leu Ser 20 25

Ile Asp Ile Pro Ala Ala Pro Gln Ala Gly Met Cys Leu Leu Ile Leu 35 40 45

<210> 133

<211> 32

<212> PRT

<213> Homo sapiens

<400> 133

Gln Phe Ser Phe Leu Ser Ala Lys Gly Leu His Trp Ala Leu Phe Val 1 5 10 15

Phe Phe Tyr Phe Leu Ser Thr Ala Cys Gln Arg Trp Ala Trp Gly Leu 20 25 30

<210> 134

<2.11> 77

<212> PRT

<213> Homo sapiens

<400> 134

Gln Phe Ser Phe Leu Ser Ala Lys Gly Leu His Trp Ala Leu Phe Val 1 5 10

Phe Phe Tyr Phe Leu Ser Thr Ala Cys Gln Arg Trp Ala Trp Gly Leu 20 25 30

Met Arg Thr Leu Ala Leu Leu Val Leu Leu Phe Cys Ser Cys Thr His \$35\$

Ser Ser Met Gly Trp Gly Arg Gln Ala Trp Gly Val Ala Leu Gly Glu 50 60

Val Arg Ser Pro Pro Ala Gln Asp Thr Val Ala Lys Thr 65 70 75

<210> 135

<211> 82

<212> PRT

<213> Homo sapiens

<400> 135

His Glu Pro Gly Arg Cys Gly Pro Glu Asn Leu Ala Leu Gln Ala Thr 1 5 10 15

Gln Arg Gly Thr Arg Phe Ser Val Pro Met Cys Lys Ser Ser Arg Gln 20 25 30

Tyr Thr Tyr Thr Ser Val His Met Cys Gln Cys Ala Cys Glu Arg Val 35 40 45

```
Glu Trp Arg Gly Ser Leu Thr Pro Ala Arg Ala Leu His Asn His Leu
     50
              55
Thr Glu Gln Trp Phe Pro His Gly Phe Pro Phe Leu Ser Arg Phe Phe
                    70
                                       75
Thr Tyr
<210> 136
<211> 24
<212> PRT
<213> Homo sapiens
<400> 136
Glu Asn Leu Ala Leu Gln Ala Thr Gln Arg Gly Thr Arg Phe Ser Yal
                                   10
Pro Met Cys Lys Ser Ser Arg Gln
  20
<210> 137
<211> 26
<212> PRT
<213> Homo sapiens
<400> 137
Met Cys Gln Cys Ala Cys Glu Arg Val Glu Tro Arg Gly Ser Leu Thr
Pro Ala Arg Ala Leu His Asn His Leu Thr
<210> 138
<211> 12
<212> PRT
<213> Homo sapiens
Leu Arg Arg Ala Ser Cys Pro Ile Trp Ser Lys Asp
                 5
                                    10
<210> 139
<211> 58
<212> PRT
<213> Homo sapiens
<400> 139
Leu Arg Arg Ala Ser Cys Pro Ile Trp Ser Lys Asp Gly Lys Thr Leu
                5
Tyr Leu Pro Val Cys Leu Ser Phe Leu His Ser Pro Ala Ser Thr Phe
            20
                                25
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Leu Pro Trp Asn Gln Gly Phe Leu Ser Pro Phe Ala Phe Ser Thr Leu 35 40 45

Gly Thr Pro Gly Ala Lys Gln Phe Ser Ile 50 55

<210> 140

<211> 166

<212> PRT

<213> Homo sapiens

<400> 140

Gly Thr Ser Thr Lys Leu Pro Tyr Cys Arg Glu Asn Val Cys Leu Ala 1 5 10 15

Tyr Gly Ser Glu Trp Ser Val Tyr Ala Val Gly Ser Gln Ala His Val 20 . 25 30 . . .

Ser Phe Leu Asp Pro Arg Gln Pro Ser Tyr Asn Val Lys Ser Val Cys
35 40 45

Ser Arg Glu Arg Gly Ser Gly Ile Arg Ser Val Ser Phe Tyr Glu His 50 55 60

Ile Ile Thr Val Gly Thr Gly Gln Gly Ser Leu Leu Phe Tyr Asp Ile
65 70 75 80

Arg Ala Gln Arg Phe Leu Glu Glu Arg Leu Ser Ala Cys Tyr Gly Ser 85 90 95

Lys Pro Arg Leu Ala Gly Glu Asn Leu Lys Leu Thr Thr Gly Lys Gly 100 105 110

Trp Leu Asn His Asp Glu Thr Trp Arg Asn Tyr Phe Ser Asp Ile Asp 115 120 125

Phe Phe Pro Asn Ala Val Tyr Thr His Cys Tyr Asp Ser Ser Gly Thr 130 135 140

Lys -Leu Phe Val Ala Gly Gly Pro Leu Pro Ser Gly Leu His Gly Asn 145 150 155 . 160

Tyr Ala Gly Leu Trp Ser 165

<210> 141

<211> 22

<212> PRT

<213> Homo sapiens

<400> 141

Cys Arg Glu Asn Val Cys Leu Ala Tyr Gly Ser Glu Trp Ser Val Tyr
1 5 10 15

Ala Val Gly Ser Gln Ala

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<210> 142
<211> 24
<212> PRT
<213> Homo sapiens
<400> 142
Pro Ser Tyr Asn Val Lys Ser Val Cys Ser Arg Glu Arg Gly Ser Gly
Ile Arg Ser Val Ser Phe Tyr Glu
            20
<210> 143
<211> 29
<212> PRT
<213> Homo sapiens
<400> 143
Asp Ile Arg Ala Gln Arg Phe Leu Glu Glu Arg Leu Ser Ala Cys Tyr
Gly Ser Lys Pro Arg Leu Ala Gly Glu Asn Leu Lys Leu
            20
<210> 144
<211> 26
<212> PRT
<213> Homo sapiens
<400> 144
Lys Leu Thr Thr Gly Lys Gly Trp Leu Asn His Asp Glu Thr Trp Arg
 1 5
                           10
Asn Tyr Phe Ser Asp Ile Asp Phe Phe Pro
            2.0
<210> 145
<211> 21
<212> PRT
<213> Homo sapiens
<400> 145
Tyr Asp Ser Ser Gly Thr Lys Leu Phe Val Ala Gly Gly Pro Leu Pro
                          10
Ser Gly Leu His Gly
             20
<210> 146
<211> 280
<212> PRT
<213> Homo sapiens
<400> 146
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Lys Pro Gln Arg Phe Arg Arg Pro Phe Phe Phe Asn His Pro Lys Pro 1 5 10 15

Ser Ser His Pro Gly Leu His Ser Arg Pro Thr Leu His Ser His Pro
20 25 30

Ala Phe His Ser His Pro Glu Leu Gln Gln Pro Thr Gln Thr Ser Pro
35 40 45

Val Pro Leu Thr Pro Glu Ser Pro Leu Phe Gln Asn Phe Ser Gly Tyr 50 55 60

His Ile Gly Val Gly Arg Ala Asp Cys Thr Gly Gln Val Ala Asp Ile
65 70 75 80

Asn Leu Met Gly Tyr Gly Lys Ser Gly Gln Asn Ala Gln Gly Ile Leu 85 90 95

Thr Arg Leu Tyr Ser Arg Ala Phe Ile Met Ala Glu Pro Asp Gly Ser 100 105 110

Asn Arg Thr Val Phe Val Ser Ile Asp Ile Gly Met Val Ser Gln Arg

Leu Arg Leu Glu Val Leu Asn Arg Leu Gln Ser Lys Tyr Gly Ser Leu 130 135 140

Tyr Arg Arg Asp Asn Val Ile Leu Ser Gly Thr His Thr His Ser Gly
145 150 155 160

Pro Ala Gly Tyr Phe Gln Tyr Thr Val Phe Val Ile Ala Ser Glu Gly
165 . 170 . 175

Phe Ser Asn Gln Thr Phe Gln His Met Val Thr Gly Ile Leu Lys Ser 180 185 190

Ile Asp Ile Ala His Thr Asn Met Lys Pro Gly Lys Ile Phe Ile Asn 195 200 205

Lys Gly Asn Val Asp Gly Val Gln Ile Asn Arg Ser Pro Tyr Ser Tyr _210 215 220

Leu Gln Asn Pro Gln Ser Glu Arg Ala Arg Tyr Ser Ser Asn Thr Asp 225 230 235 240

Lys Glu Met Ile Val Leu Lys Met Val Asp Leu Asn Gly Asp Asp Leu 245 250 255

Gly Leu Ile Ser Phe Ser Phe Ser Lys Ser Ala Leu Gly Thr Tyr Tyr 260 265 270

Glu Pro Arg Asn Thr Ser Leu Glu 275 280

<210> 147

<211> 30

<212> PRT

<213> Homo sapiens

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Lys Pro Ser Ser His Pro Gly Leu His Ser Arg Pro Thr Leu His Ser
                                    10
His Pro Ala Phe His Ser His Pro Glu Leu Gln Gln Pro Thr
                              25
<210> 148
<211> 26
<212> PRT
<213> Homo sapiens
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Arg Ala Asp Cys Thr Gly Gln Val Ala Asp Ile Asn Leu Met Gly Tyr
                                    10
Gly Lys Ser Gly Gln Asn Ala Gln Gly Ile
     20
<210> 149
<211> 24
<212> PRT
<213> Homo sapiens
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Arg Ala Phe Ile Met Ala Glu Pro Asp Gly Ser Asn Arg Thr Val Phe
                                   10
Val Ser Ile Asp Ile Gly Met Val
            20
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<211> 27
<212> PRT
<213> Homo sapiens
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 Arg Leu Gln Ser Lys Tyr Gly Ser Leu Tyr Arg Arg Asp Asn Val Ile
 Leu Ser Gly Thr His Thr His Ser Gly Pro Ala
             20
 <210> 151
 <211> 23
 <212> PRT
 <213> Homo sapiens
 <400> 151
 Ala Ser Glu Gly Phe Ser Asn Gln Thr Phe Gln His Met Val Thr Gly
                                    10
 Ile Leu Lys Ser Ile Asp Ile
             20
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